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ABSTRACT

Resin (106) for shielding neutrons is provided at the outer periphery of a shell main body (101) that shields the γ-rays. Basket (130) is constructed of a plurality of angular pipes (132) having neutron absorbing property. The inside of a cavity (102) of the shell main body (101) is processed to match its shape with the external shape of the basket (130), and the angular pipes (132) are inserted into this cavity (102) to be brought into contact with the inner surface of the cavity (102). Used nuclear fuel aggregates are accommodated and stored in latticed cells structured by the angular pipes (132). Thermal conductivity of decay heat generated from the used nuclear fuel aggregates is improved as the outer surface of the angular pipes (132) and the inner surface of the cavity (102) are in direct contact with each other.